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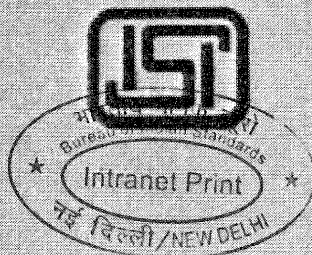
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Indian Standard

SPECIFICATION FOR SODA-LIME CANISTERS FOR USE WITH GAS ANAESTHETIC APPARATUS (WATERS' TO-AND-FRO)

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MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1

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Indian Standard

SPECIFICATION FOR SODA-LIME CANISTERS FOR USE WITH GAS ANAESTHETIC APPARATUS (WATERS'. TO-AND-FRO)

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Indian Standard

SPECIFICATION FOR SODA-LIME CANISTERS FOR USE WITH GAS ANAESTHETIC APPARATUS (WATERS' TO-AND-FRO)

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 29 May 1970, after the draft finalized by the Anaesthesia, Resuscitation and Allied Equipment Sectional Committee had been approved by the Consumer Products Division Council.

0.2 This standard has been formulated at the instance of the Advisory Committee for Development of Surgical Instruments, Equipment and Appliances, Government of India.

0.3 This standard is one of a series of Indian Standards on diagnostic and anaesthetic equipment. Other specifications in the series are given on page 6.

0.4 This standard contains clause 7.1 which calls for agreement between the purchaser and the supplier or which permits the purchaser to use his option for selection to suit his requirements.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, **expressing** the result of a test, shall be rounded off in accordance with IS: 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard covers the requirements of soda-lime canisters used with **gas** anaesthetic apparatus (Waters' to-and-fro).

*Rules for rounding off numerical values (*revised*).

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2. MATERIALS

2.1 The canister shall be made from one of the following materials:

- a) Brass conforming to Grade **CuZn 40 (A)** of IS :**422-1967***. The thickness shall be 1 mm, *Min*,
- b) Copper conforming to Grade **1** of IS :**1550-1967†**. The thickness shall be 1 mm, *Min*, or
- c) Transparent plastics conforming to Type **1** of IS :**2267-1962‡**. The thickness shall be **1.5** mm, *Min*.

2.1.1 The canister when made from plastics shall have the distal and machine end covers made from brass or copper specified in 2.1 (a) or 2.1 (b) respectively.

3. CAPACITY

3.1 The capacities shall be 100, 150, 300 and 450 g.

4. WORKMANSHIP AND FINISH

4.1 The canister when made from brass or copper shall be free from cracks, tool-marks and like defects.

4.2 The canister when made from plastics shall be free from moulding defects, specks, cracks and like defects. The surfaces shall be smooth.

4.3 The brass and copper parts shall be plated chromium over nickel. The plating shall conform to Service Grade No. 2 of IS :**4827-1968§**.

5. REQUIREMENTS

5.1 Wire gauze made from wire cloth of aperture size 500 conforming to IS : **2405-1963||** shall be housed at both the ends of the canister.

5.2 The canister shall **pass** leakage test as prescribed in 8.1.

*Specification for brass sheet and strip for the manufacture of utensils (*first revision*).

†Specification for copper sheet and strip for utensils and for general purposes (first revision).

‡Specification for polystyrene moulding materials.

§Specification for electroplated coatings of nickel and chromium on copper and copper alloys.

||Specification for wire cloth and perforated plates for industrial sieves.

5.3 The machine end of the canister shall have a male conical fitting and the distal end shall have a female conical fitting. Canisters of capacity 100 g and 150 g shall have conical fittings of the **paediatric** size. Canisters of capacity 300 g and 450 g shall have conical fittings of the adult size. The conical fittings shall conform to IS : 5413-1969*.

5.4 The washer used shall be leak-proof and shall be made of durable antistatic material.

6. MARKING

6.1 Each canister shall be clearly and indelibly marked with the following:

- a) Name of the manufacturer, his initials or registered trade-mark; and
- b) Capacity.

6.1.1 The canister may also be marked with the IS1 Certification Mark.

NOTE—The use of the IS1 Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by IS1 and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by IS1 for conformity to the standard. Details of conditions, under which a **licence** for the use of the IS1 Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

7. PACKING

7.1 The canister shall be packed as agreed to between the purchaser and the supplier or as given in 7.1.1.

7.1.1 The canister shall be packed in a strong cardboard box with at least one cm layer of cotton wool between the sides of the box and the canister.

8. TESTS

8.1 The filled canister shall be tested under water to withstand without leakage an internal air pressure of **0.15 kg/cm² (14.7 kN/m²)**.

*Specification for conical fittings for to-and-fro carbon dioxide absorber (water type) for use with gas anaesthetic apparatus.

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